

HLP-II Resource Mobilization for achieving the Aichi Targets

Hillary M Masundire

HLP-II

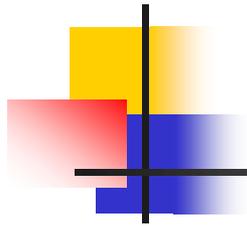
University of Botswana

IUCN Commission on Ecosystem Management



The HLP task

- Develop an assessment of the benefits of meeting the Aichi targets, examining both direct biodiversity benefits and wider benefits to society that result from the investments and policy developments required.
- Assess the range of the costs of implementing the activities needed to achieve the targets, taking into account the further work proposed in the High Level Panel report to COP-11.
- Identify opportunities to secure the benefits most cost effectively through actions in both the biodiversity sector and across economies as a whole that can mobilize / make better use of resources, to deliver greatest progress towards meeting the Aichi targets.

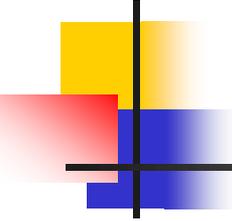


- The HLP-I found that it was difficult to quantify current allocations of resources for the delivery of the Aichi Targets or to compare them with the estimated resource requirements.
- HLP-II examines evidence of allocations compared to needs within different countries to help address this question.
- The HLP-II attempts to ensure the alignment of achieving Aichi targets with the Post-2015 UN Development Agenda and the Sustainable Development Goals.
- This has implications for net resource requirements and funding strategies,
 - synergies between the Aichi Targets and development objectives will reduce the extra resources required to deliver them,
 - managing potential conflicts between biodiversity and development goals



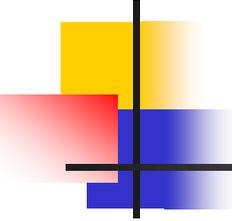
HLP-I vs HLP-II

- HLP-I presented separate cost estimates for different Target clusters, and assumed that these actions would proceed simultaneously.
- HLP-II notes that
 - synergies and overlaps between Targets and with wider policy agendas mean that a more integrated approach to delivery could reduce overall resource needs,
 - the sequence in which investments are made will affect the overall cost, particularly if there is an initial focus on the Targets that deliver the right enabling conditions for subsequent action.
 - some investments will deliver greater biodiversity gains than others relative to the costs incurred.



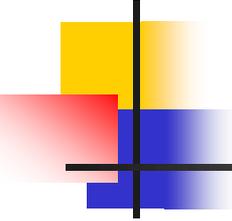
Key questions

- What will be the benefits of delivering the Aichi targets?
- What investments need to be made to deliver the Aichi targets and to secure these benefits?
- What evidence is there of resource needs at the project and country level?
- How do the identified investment needs and the benefits they will achieve align with other policy agendas, such as the Post-2015 UN Development Agenda and the Sustainable Development Goals?



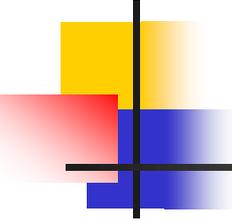
Key questions (cont...)

- How can the Aichi Targets be delivered at least cost, taking account of the synergies between the targets and the investments required, the sequencing of actions and the synergies with other policy agendas?
- What does the evidence as identified above tell us about the balance between the benefits and costs of meeting the Targets?



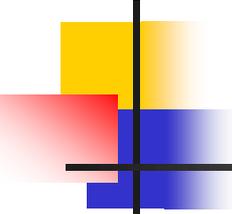
Approach

- Desk study – contracted to a research team led by UNEP-WCMC
- Africa study by **ANCHOR Environmental**
- Information sources included:
 - academic papers, government studies, NBSAPs, country submissions to CBD on resource requirements, regional studies (e.g. EU, ADB), TEEB country studies, international organisations (e.g. OECD, UNEP, UNDP, World Bank), international programmes (e.g. GEF), multi-country assessments (e.g. BIOFIN, WAVES, Natural Capital Project), global assessments (e.g. GBO-4), NGO assessments, international databases
- focus on the various actions/investments that would be required to meet the Aichi targets, whether or not they were specifically intended to meet the targets.



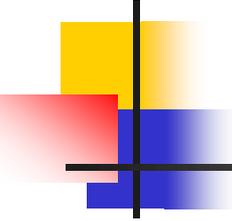
Some challenges

- research and reports were biased toward countries with more developed infrastructure,
- many countries without reports or case studies are under-represented, potentially skewing costs towards countries with monitoring/assessment capacity.,
- very little information is available on the costs of investments made, or on their effectiveness.



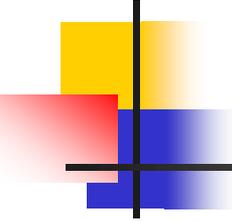
Report structure

- Benefits of achieving Aichi targets
- Investments and priority actions
- Resource requirements
- Alignment and synergy with other policy & development agendas
- Cost-effective delivery of Aichi targets
- Costs and benefits



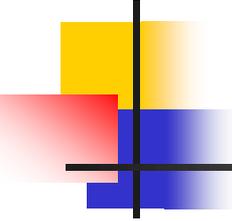
Benefits: Provisioning services

- As the primary goal of the Aichi targets is to reduce the loss of valuable biodiversity and ecosystem services, Africa is a key area for action, as it contains a large share of the world's biodiversity but this biodiversity is disappearing at a rapid rate.
- Africa's populations depend heavily on provisioning services of ecosystems (e.g. forest, fish and wildlife resources) for their livelihoods.
- Evidence suggests that harvested natural resources typically provide more than a quarter of rural household incomes.
- Genetic resources are important for sustaining and developing agricultural activities, including aquaculture and horticulture, as well as for pharmaceuticals.



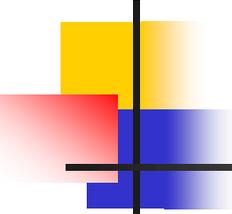
Benefits: Regulating Services...

- Ecosystems provide a number of regulating services e.g.
 - hydrological services, (flood and erosion control)
 - agricultural support services (pollination, control of pests),
 - human health services (water purification, control of pathogens)
 - climate regulation (including carbon sequestration),
 - sediment retention,
 - the provision of critical areas for biodiversity (refugia, nursery areas).
- Estimates of values exist for most of these, but are mostly fairly preliminary, limited in geographical area and lacking in biophysical evidence.



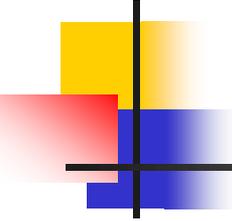
Benefits: cultural services

- Ecosystem-based tourism is considered to be an important growth area in Africa.
- Nature-based tourism contributes a high portion of national income in countries such as Kenya, Tanzania, Seychelles and Botswana where investment has focused on this sector.



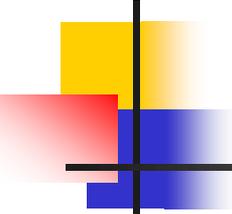
Case example 1: Odzala-Kokoua Parc Nationale, Congo

- the Odzala-Kokoua Foundation run by Africa Parks together with local communities
- 114 mammal species, more than 400 birds and in excess of 4,400 varieties of plants
 - 16 primate species
 - between 11,000 and 18,000 elephants
 - 440 bird species .
- A CNN produced five news reports for CNN TV International and a half-hour documentary special on the conservation of Odzala's gorillas and elephants for CNN Inside Africa. The news segments have been posted on the [CNN website](#).



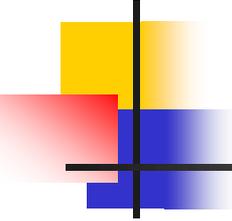
Case example 2: Okavango Delta, Botswana

- The Okavango Delta in **Botswana** generates an estimated
 - US\$111.5 million in tourism revenues,
 - \$1.8 million in income to households from agriculture and natural resources,
 - \$1.6 million in groundwater recharge,
 - P86 million in Carbon sequestration,
 - \$7.7 million in refuge value,
 - \$0.22 million for water purification
 - \$1.8 million in scientific and educational value.
- Overall, it contributes 2.1% to the country's GNP, including direct and indirect impacts (Turpie et al. 2006).



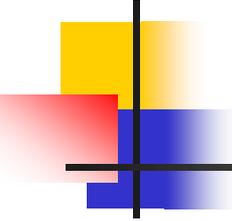
Drivers of Biodiversity losses

- huge rural subsistence populations on land and resources, most of which are subject to open access,
- increasing and poorly managed commercial exploitation of timber and fish resources
- the loss of land to mineral and oil exploitation and for production of palm oil and biofuels,
- urban demands fuelling deforestation for timber, charcoal and firewood by the informal sector;
- illegal international trade in biodiversity and biodiversity products;
- invasive alien species



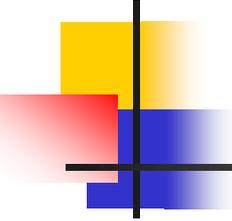
Drivers of biodiversity loss cont....

- hydrological alteration due to water demands,
- water pollution,
- relatively low levels of understanding and appreciating the value of biodiversity
- lack or low levels of awareness and appreciation of value and importance of biodiversity
 - question: what is the level of awareness at different levels of society?
- poor governance including inadequate implementation of existing policies and legislation pertaining to biodiversity conservation and use – lack of adequate political will
- These problems will be further exacerbated by climate change.



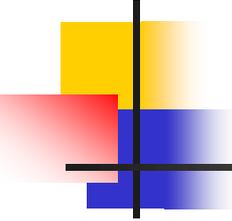
Investments and priorities for action

- The required actions for the 20 targets:
 - A. those that guide and prepare for the core actions (research, planning and increasing awareness & capacity), and
 - B. those pertaining to the actual changes that need to be brought about (direct conservation action, correcting incentives and improving technology).
- To gain political will, it is critical to estimate and communicate the value of biodiversity and implications of current trajectories to policy and decisions makers at various/all levels
- Build and enhance capacity in all aspects of biodiversity conservation – coordination of actions at all levels
- Address priority rights and land tenure issues



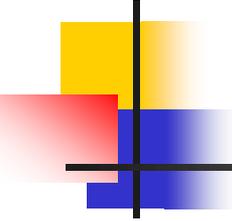
Research & Development

- Valuation of biodiversity
- Biodiversity and socio-ecological systems
- Priority areas and IAS for conservation action
- Indigenous/Traditional knowledge – **challenges?**
- Impacts of policy measures
- More efficient and cleaner production technologies
- Product development
- Monitoring and information systems
- Natural resource accounting (Wealth Accounting and the Valuation of Ecosystem Services (WAVES))



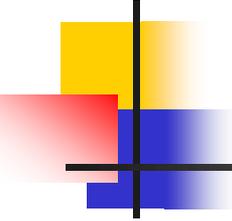
Develop strategies and plans

- Integrated conservation and development planning (including prioritisation of conservation/restoration efforts)
- Integrated catchment, water and waste management
- Integrated coastal zone management
- Strategies to reduce negative impacts of production and consumption
- Sustainable harvesting strategies
- Sustainable agri-, aqua- and silviculture strategies
- Update/revise policies, legislation and institutions
- Financing strategies



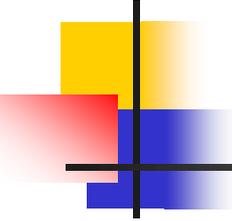
Awareness and capacity

- Educate children, users, public, policy makers, extension officers about values, trade-offs, strategies and management measures
- Capacity building to foster participation of indigenous local communities



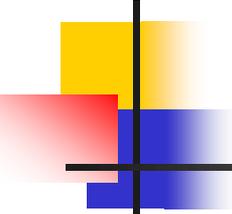
Resource requirements

- Research and development expenditure could be in the order of \$17.5 million.
 - Investments in awareness and capacity probably need to be in the order of \$7-8 million per country, and
 - about \$5-10 million needs to be spent on integrated land and resource use planning per country.
 - The WAVES programme has allocated an average of **\$1.5 million** per country in order to develop natural resource accounts (Rayment 2012).
- Costs of achieving sustainable land and resource use are extremely variable, ranging up to \$2000 per ha.
- All African countries are spending considerably less than 1% of their GDP on direct conservation activities, and the majority spend less than 0.1%.



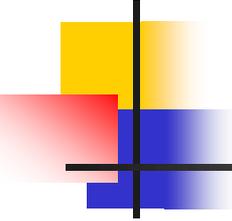
Raising awareness & capacity

- Several campaigns have been carried out, some at great cost
- Assuming that national survey would need to be based on sample size of 1000 people, Conway (2012) suggested that such surveys could cost between US\$50,000 and \$100 000 depending on how difficult it is to reach the public.



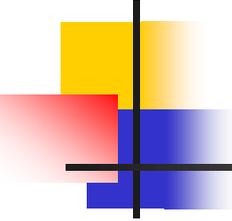
Example 1

- Cross River Gorilla Conservation in Nigeria and Cameroon: *"My Gorilla - My Community"*
- The campaign targeted behaviour change to promote habitat conservation for the last remaining 250 Cross River gorillas that reside in Nigeria and Cameroon. The project involved engagement with local communities in dialogue and activities that promote the conservation of habitat and cessation of harmful activities. An Entertainment-Education drama (Linda's Joint) was also prepared for broadcast.
- **\$100 000 per year**



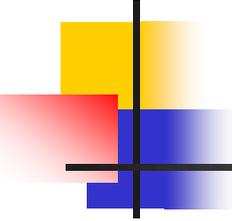
Example 2

- “Every River Has its People” (ERP)– Okavango,
- This SIDA-funded project has served to raise awareness of the management issues of the Okavango River basin among local communities in Angola, Botswana and Namibia as well as building capacity and sharing information.
- 2 million over 3 years for Phase 2



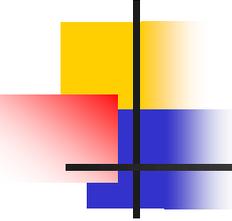
Example 3

- School education program (South Africa)
- Midlands Meander Education Project – aim to integrate environmental education into school curriculum through educator support and co-teaching
- \$5000 for one school (112 children and 6 teachers)



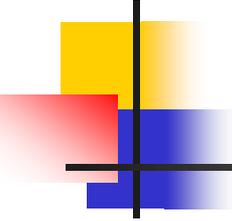
Example 4

- the Pangani River Basin Management Project (2002 to 2010) cost US\$ 4.78 million (Cross and Förster 2011). Of this about US\$200 000 was spent on quantifying changes in ecosystem services and the overall social and environmental tradeoffs – Tanzania
- the Malagasy government has invested \$75 million in the formation of a protected area network over a ten year period, resulting in a total of 41 protected areas covering approximately 1.5 million hectares. Donor funded!



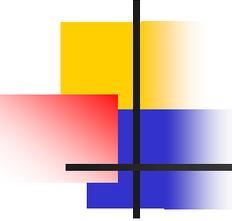
Current expenditures

- Project from report



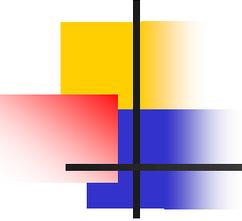
Funding gaps

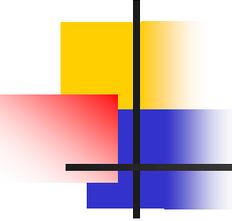
- Not easy to identify & quantify
- In South Africa, the annual management expenditure of protected areas in the Cape Floristic Region (CFR) was found to be only 48% of what was considered adequate for effective management (Frazee et al. 2003).
- Estimates from other countries



Alignment with other policy and development agendas

- There are strong synergies between biodiversity and global development agendas.
- There is a significant overlap between the Aichi targets (especially targets 4, 6 and 7) and the Millennium Development Goal (MDG7) to ensure environmental sustainability.
- the Aichi targets as a whole will make important contributions to Millennium Development Goals 1 and 6, though gains in natural capital and the flow of ecosystem services that impact on human health and livelihoods, as well as supporting economic development.

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- The pre- and post-2015 development goals will facilitate meeting the Aichi Targets and will be critical to maintaining the achievements in the longer term.
 - There are also very strong synergies between the Aichi targets and the UN FCCC and UN CCD, since both of these require addressing and reversing ecosystem degradation.



Challenges/opportunities

- Low levels or lack of awareness and appreciation of the value of biodiversity at critical levels of society
 - Youth
 - Industry and commerce
 - Local and national government
 - Regional and pan-African
- Low levels or lack awareness and appreciation of human dependence on ecosystem services, including biodiversity, for livelihoods.
- Lack of or inadequate funding for biodiversity conservation
- Inability to fully account/track funding used for biodiversity conservation